

WHAT IS CLAIMED IS:

1. A regulator valve with a flow indicator for a hot-water heating system, of a type including:

- a duct (13) for carrying water into the valve;
- a rotatable knob (18) for regulating the flow of water through the duct (13) by means of a shutter;
- a tubular body (20), projecting externally, of a material which is at least partially transparent and having an internal cavity (21);
- a flow indicator rod, slidable inside the valve, with a portion housed in the intake duct (13) and an indicator portion housed in the internal cavity (21) of the transparent body (20);

wherein:

- the indicator rod (40) has a lower portion in the shape of a conical head (41) serving as a shutter for the intake duct (13) and an upper indicator portion with a first upper area for indicating that no water is flowing and a second, lower portion for indicating that water is flowing through the duct (13); and in that

- the transparent body (20) is secured to the knob (18) and coupled axially by threaded means (42) to a tubular element (30) of the valve so as to adjust upwards or downwards the position of an abutment surface (48) of the rod (40) and thereby cause the closure or degree of aperture of the valve;

the valve being capable of taking the following operational conditions:

- a closed condition in which the transparent body (20) is lowered so as to hold the rod (40) in a position closing the duct (13);

- an at least partially open position, in which the transparent body (20) is raised so as to allow the rod (40) into a raised position, when water is flowing through the duct (13) and the second portion (47), indicating this flow, is visible through the transparent body (20) and a lowered position, when no water is flowing through the duct (13) and the first portion (46), indicating an absence of water, is visible through the transparent body (20).

2. The regulator valve of Claim 1, wherein the knob (18) includes a cover of a non-transparent material enclosing an upper portion of the transparent body (20) in such a way that, when the valve is at least partially open, the cover reveals a portion (20a) of the transparent body (20) through which at least one of the aforesaid first (46) and second (47) areas of the upper, indicator portion of the rod (40) is visible, in dependence on the vertical position of the rod.

3. The regulator valve of Claim 2, wherein the closed position of the valve, the cover (18) encloses substantially the entire externally projecting portion of the transparent body (20).

4. The regulator valve of Claim 1, wherein the conical head portion (41) and the indicator portion (46, 47) are formed in one piece.

5. The regulator valve of Claim 1, wherein the cavity (21) of the transparent body (20) has a constant cross section.

6. The regulator valve of Claim 1, wherein a resilient biasing element (26) is housed in the internal cavity (21)

of the transparent body (20) interposed between this latter and the shutter-indicator rod (40) for urging this latter into its lowered position.

7. The regulator valve of Claim 1, wherein the intake duct (13) is formed of a first, lower metal tubular element (11) coupled mechanically to a second, upper metal tubular element (30) in which the transparent body (20) is secured by threaded means.

8. The regulator valve of Claim 1, wherein the first area (46) indicating no water is flowing is of a colour tending towards blue and the second area (47) indicating water is flowing is of a colour tending towards red.

9. The regulator valve of Claim 1, wherein it is mounted in a hollow sleeve-like body (10) composing or constituting a return manifold in a water-based heating system.